

## FFIEC Geocoder Technical Information

As of January 1, 2023, the service supporting the FFIEC's Geocoder is changing to ESRI's [ArcGIS World Geocoding Service](#).<sup>1</sup> It is possible that the change may result in the FFIEC's Geocoder returning a different census tract and display location for certain addresses compared with the previously provided results. We provide details below on the FFIEC Geocoder process.

The FFIEC Geocoder returns a census tract for an address only if the following conditions are met:

- The address exists in the ESRI address database.
- The ESRI "address type" is either a Subaddress, PointAddress, or StreetAddress.
- The ESRI match score must be 98 or higher.<sup>2</sup>

When these conditions are met, the ArcGIS World Geocoding Service returns a latitude and longitude. Taking the coordinates, the Geocoder next determines the census tract for the address. The appropriate census tract is determined by TIGER files issued by the U.S. Census Bureau.<sup>3</sup> Census updates tract boundaries every 10 years and adopts tract/county code changes annually as necessary.<sup>4</sup> The following table presents links to the appropriate TIGER file for each FFIEC Census year. Users attempting to independently replicate the Geocoder should download TIGER files for each state or US territory.

FFIEC Year	Source	Notes <sup>5</sup>
2023	<a href="https://www2.census.gov/geo/tiger/TIGER2020/TRACT/">https://www2.census.gov/geo/tiger/TIGER2020/TRACT/</a>	No changes from 2022.
2022	<a href="https://www2.census.gov/geo/tiger/TIGER2020/TRACT/">https://www2.census.gov/geo/tiger/TIGER2020/TRACT/</a>	Reflects 2020 Decennial Census tract boundaries.
2021	<a href="https://www2.census.gov/geo/tiger/TIGER2017/TRACT/">https://www2.census.gov/geo/tiger/TIGER2017/TRACT/</a>	No changes from 2017.
2020	<a href="https://www2.census.gov/geo/tiger/TIGER2017/TRACT/">https://www2.census.gov/geo/tiger/TIGER2017/TRACT/</a>	No changes from 2017.
2019	<a href="https://www2.census.gov/geo/tiger/TIGER2017/TRACT/">https://www2.census.gov/geo/tiger/TIGER2017/TRACT/</a>	No changes from 2017.
2018	<a href="https://www2.census.gov/geo/tiger/TIGER2017/TRACT/">https://www2.census.gov/geo/tiger/TIGER2017/TRACT/</a>	No changes from 2017.
2017	<a href="https://www2.census.gov/geo/tiger/TIGER2017/TRACT/">https://www2.census.gov/geo/tiger/TIGER2017/TRACT/</a>	Reflects 2010 Decennial Census tract boundaries with 2011-2015 ACS code changes.

<sup>1</sup> For questions about the geocoding service, please contact [basd@frb.gov](mailto:basd@frb.gov) and write "FFIEC Geocoding and Mapping System" in the subject line. To contact ESRI about obtaining access to the [ArcGIS World Geocoding Service](#), please contact [FSI@esri.com](mailto:FSI@esri.com).

<sup>2</sup> For a given user inputted address, there may be several addresses in the ESRI database that meet the criteria listed above (this is sometimes referred to as "ties"). When this occurs, only the top match (determined by ESRI) is returned. [ESRI documentation](#) provides more information on address types and scores.

<sup>3</sup> Background information regarding TIGER files is located in [Census Bureau documentation](#).

<sup>4</sup> Tract boundaries are set by the Decennial Census. Geographic boundary vintages can be found here: <https://www.census.gov/programs-surveys/acs/geography-acs/geography-boundaries-by-year.html>.

<sup>5</sup> See the [Census Info Sheets](#) for more details for specific years.

As an aid to individuals who wish to independently replicate the FFIEC Geocoder, the following [Excel file](#) can be used to quickly determine the state and county names associated with geocoded state and county codes. The lists are separated by year to account for OMB MSA boundary changes.

<b>FFIEC Year</b>	<b>Notes<sup>6</sup></b>
2023	No changes from 2022.
2022	Reflects 2019 county changes in Alaska.
2021	No changes from 2019.
2020	No changes from 2019.
2019	Reflects updates announced by the <a href="#">OMB in September, 2018</a> .
2018	Reflects updates announced by the <a href="#">OMB in August 2017</a> .
2017	Reflects tract changes made in the 2011-2015 ACS.

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<sup>6</sup> See the [Census Info Sheets](#) for more details.